

Attorney's Docket No.: 10559-268001 / P9023

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Debra Bernstein et al.

Art Unit : 2183

Serial No.: 09/747,019

Examiner: S. Rampuria

Filed Title

: December 21, 2000

BREAKPOINT METHOD FOR PARALLEL HARDWARE THREADS IN

MULTITHREADED PROCESSOR

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

RECEIVED

2182

JUN 0 7 2004

INFORMATION DISCLOSURE STATEMENT

Technology Center 2100

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed after a first Office Action on the merits, but before receipt of a final Office Action or a Notice of Allowance. A check for \$180 in payment of the late submission fee of §1.17(p) is enclosed. Please apply any other charges or credits to Deposit Account No. 06-1050, reference 10559-268001.

Respectfully submitted,

Denis G. Maloney Reg. No. 29,670

Fish & Richardson P.C.

225 Franklin Street

Boston, MA 02110-2804

Telephone: (617) 542-5070

Facsimile: (617) 542-8906

The PTO did not receive the following

Check

20811390.doc

listed Items(s)

06/04/2004 JBALINAN 00000138 061050 09747019

01 FC:1806

180.00 DA

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissione 0, Alexandria, VA 22313-1450.

Date of Depos

Signature

Typed or Printed Name of Person

BEST AVAILABLE COPY

Substitute Form PTO-1449

U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. 10559-268001

Application No. 09/747,019

Information Disclosure Statement by Applicant
Use several sheets if necessary)

Applicant Debra Bernstein et al.

Filing Date December 21, 2000

Group Art Unit 2124

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner	Desig.	Document	Publication	Country or	i atent /	тррпсацо		slation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	
	AA	WO 01/50679	07/12/2001	WIPO	F	RECFI	VET	•
	AB	WO 01/50247	07/12/2001	WIPO			V L	-
	AC	WO 01/48619	07/05/2001	WIPO	1	JUN 0 7	2004	
	AD	WO 01/48606	07/05/2001	WIPO	Tec	hnology Ce	nter 21	nn
	AE	WO 01/48599	07/05/2001	WIPO		3) 00	INOLE I	00
	AF	WO 01/48596	07/05/2001	WIPO				
	AG	WO 01/41530	06/14/2001	WIPO				
	AH	WO 01/16782	03/08/2001	WIPO	1			
	AI	WO 01/16770	03/08/2001	WIPO				
	AJ	WO 01/16769	03/08/2001	WIPO				
	AK	WO 01/16718	03/08/2001	WIPO				
	AL	WO 01/15718	03/08/2001	WIPO				
	AM	WO 97/38372	10/16/1997	WIPO				
	AN	WO 94/15287	07/07/1994	WIPO				
	AO	EP 0 809 180	11/26/1997	Europe			···········	
	AP	EP 0 745 933	12/04/1996	Europe				
	AQ	EP 0 633 678	01/11/1995	Europe				
	AR	EP 0 464 715	01/08/1992	Europe				
	AS	EP 0 379 709	08/01/1990	Europe				
	AT	59111533	06/27/1984	Japan				

Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner	Desig.	, and the distriction			
Initial	ID	Document Document			
	AU	Agarwal et al., "April: A Processor Architecutre for Multiprocessing," Proceedings of the 17 th Annual International Symposium on Computer Architecutre, IEEE, pp. 104-114.			
	AV	Byrd et al., "Multithread Processor Architectures," <i>IEEE Spectrum</i> , Vol. 32, No. 8, New York, 1 August 1995, pp. 38-46.			
	AW	Chang et al., "A New Mechanism For Improving Branch Predictor Performance," IEEE, pp. 22-31 (1994).			

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicant.	t in conformance and not considered. Include copy of this form with

Substitute Form PTO-1449

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 10559-268001

Applicant

Application No.

09/747,019 ECEIV

Information Disclosure Statement
by Applicant
Use several sheets if necessary)

Debra Bernstein et al.

JUN 0 7 2004

(37 CFR §1.98

Filing Date
December 21, 2000

Group Art Unit

Technology Center 2100

& TRADEMA!	<u> </u>	Testinology Cen			
Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner Initial	Desig. ID	Document			
	AX	Doyle et al., <i>Microsoft Press Computer Dictionary</i> , 2 nd ed., Microsoft Press, Redmond, Washington, USA, 1994, p. 326.			
	AY	Farkas et al., "The multicluster architecture: reducing cycle time through partitioning," IEEE, vol. 30, December 1997, pp. 149-159.			
	AZ	Fillo et al., "The M-Machine Multicomputer," IEEE Proceedings of MICRO-28, 1995, pp. 146-156.			
	AAA	Gomez et al., "Efficient Multithreaded User-Space Transport for Network Computing: Design and Test of the TRAP Protocol," <i>Journal of Parallel and Distributed Computing</i> , Academic Press, Duluth, Minnesota, USA, vol. 40, no. 1, 10 January 1997, pp. 103-117.			
	ABB	Haug et al., "Reconfigurable hardware as shared resource for parallel threads," IEEE Symposium of FPGAs for Custom Computing Machines, 1998.			
	ACC	Hauser et al., "Garp: a MIPS processor with a reconfigurable coprocessor," Proceedings of the 5 th Annual 1EEE Symposium on Field-Programmable Custom Computing Machines, 1997.			
	ADD	Hennessy et al., "Computer Organization and Design: The Hardware/Software Interface," Morgan Kaufman Publishers, 1998, pp. 476-482.			
-	AEE	Hyde, R., "Overview of Memory Management," Byte, vol. 13, no. 4, 1998, pp. 219-225.			
	AFF	Intel, "1A-64 Application Developer's Architecture Guide," Rev.1.0, May 1999, pp. 2-2, 4-29 to 4-31, 7-116 to 7-118 and c-21.			
	AGG	Keckler et al., "Exploiting fine grain thread level parallelism on the MIT multi-ALU processor," IEEE, June 1998.			
	AHH	Litch et al., "StrongARMing Portable Communications," IEEE Micro, 1998, pp. 48-55.			
	AII	Mendelson et al., "Design Alternatives of Multithreaded Architecture," <i>International Journal of Parallel Programming</i> , vol. 27, no. 3, Plenum Press, New York, USA, June 1999, pp. 161-193.			
	AJJ	Paver et al., "Register Locking in Asynchronous Processor Computer Design: VLSI Processors," ICCD '92 Proceedings, IEEE 1992 International Conference, 1992, pp. 385-398			
	AKK	Schmidt et al., "The Performance of Alternative Threading Architectures for Parallel Communication Subsystems," Internet Document, Online!, 13 November 1998.			
	ALL	Thistle et al., "A Processor Architecture for Horizon," IEEE, 1998, pp. 35-41.			
	AMM	Tremblay et al., "A Three Dimensional Register File for Superscalar Processors," IEEE Proceeding of the 28th Annual Hawaii International Conference on System Sciences, 1995, pp. 191-201.			
	ANN	Trimberger et al, "A time-multiplexed FPGA," Proceedings of the 5 th Annual IEEE Symposium on Field-Programmable Custom Computing Machines," 1998.			
	AOO	Turner et al., "Design of a High Performance Active Router," Internet Document, Online, 18 March 1999.			
	APP	Vibhatavanijt et al., "Simultaneous Multithreading-Based Routers," Proceedings of the 2000 International Conference of Parallel Processing, Toronto, Ontario, Canada, 21-24 August 2000, pp. 362-359.			
	AQQ	Wadler, "The Concatenate Vanishes," University of Glasgow, December 1987 (revised November 1989), pp. 1-7.			
	ARR	Waldspurger et al., "Register Relocation: Flexible Contents for Multithreading," Proceedings of the 20 th Annual International Symposium on Computer Architecture," 1993, pp. 120-130.			

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet	_3_	of	_3
-------	-----	----	----

			511cct <u>5</u> 01 <u>5</u>
Substitute Form PTO-1449 (Madified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10559-268001	Application No. 09/747,019
Information Disclosure Statement by Applicant se several sheets if necessary)		Applicant Debra Bernstein et al.	
Se several s	heets if necessary)	Filing Date December 21, 2000	Group Art PSECEIVE

1384/ CFR \$1.98			ecember 21, 2000	2124	
& TRADEMA	Other D	ocuments (include Author, Title	e. Date. and Place of	f Publi	cation 0 7 2004
Examiner Initial	Desig. ID	,	Document		Technology Center 2100
	ASS	Wazlowski et al., "PRSIM-II computer an for Custom Computing Machines, 1993.			
		×			

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.